The *Carlina vulgaris* complex in central Europe includes several lineages defined by their ecology, morphology and distribution. This diploma thesis is focused on relationships between the taxa recognized in the Czech Republic, namely *Carlina vulgaris* subsp. *vulgaris*, *C. biebersteinii* subsp. *biebersteinii*, *C. biebersteinii* subsp. *brevibracteata* and *C. biebersteinii* subsp. *sudetica*.
Molecular analysis revealed two genetically defined groups. One includes samples from relict populations in western Bohemia and from high mountains classified as *C. biebersteinii* subsp. *biebersteinii* and *C. biebersteinii* subsp. *sudetica*. The other is represented by plants classified as *C. vulgaris* and *C. biebersteinii* subsp. *brevibracteata*. This genetic differentiation was also confirmed by morphometric analysis. However, relationships within these two groups remain unclear.
The Czech populations of *Carlina biebersteinii* subsp. *biebersteinii* as well as of *C. biebersteinii* subsp. *sudetica* are closely related to the mountain populations in the Alps and Carpathians. Their occurrence in the Czech Republic is relict and they should be in focus of nature conservation. However, the separate taxonomic position of the claimed endemic *C. biebersteinii* subsp. *sudetica* is probably unjustified.